

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 18, 2017

TO: Steven Stokes, Technical Director
FROM: Jennifer Meszaros and Rory Rauch, Resident Inspectors
SUBJECT: Oak Ridge Activity Report for Week Ending September 15, 2017

Staff member R. Tontodonato was on site this week to observe resident inspector activities.

Highly Enriched Uranium Materials Facility (HEUMF): This week, the HEUMF safety-significant power distribution system (PDSS) failed a technical safety requirement (TSR) surveillance. Although the PDSS diesel generator ran successfully during the 12-hour test, it did not meet an acceptance criterion identified in the facility TSR bases that mandates a minimum fuel level in the diesel fuel tank at test completion. CNS held a critique to discuss this event. During the critique, facility management noted that contractual challenges associated with diesel generator fuel procurement prevented them from having sufficient fuel available onsite to complete the surveillance by the September due date. Although facility personnel identified this issue in August, they assumed that they could utilize a grace period to extend the due date of the surveillance by approximately one month. One week prior to the surveillance due date, facility operations management identified that the TSR bases specifically prohibit the use of a grace period for this surveillance. Management chose to perform the surveillance, knowing that the tank fuel level would not meet the TSR surveillance requirement acceptance criterion, rather than declare a TSR violation. Corrective actions identified during the critique include improvements related to procurement processes and the identification of grace periods in TSRs.

Transuranic Waste Processing Center (TWPC): In August, a North Wind radiological control technician (RCT) was exiting a platform via a removable ladder after surveying a remote-handled transuranic waste cask. As the RCT began his descent, the ladder became dislodged from the platform and the RCT fell approximately four feet. At the time of the event, the RCT was wearing personal protective equipment (PPE), including anti-contamination clothing and a respirator. This week, the resident inspectors walked down the room in which the fall occurred and discussed the event with North Wind management. They discussed the immediate actions of nearby workers, who appropriately addressed the potential that the RCT was both injured and contaminated. The resident inspectors suggested that North Wind management utilize this event as a positive lesson learned in upcoming facility worker first aid training. Additionally, the resident inspectors discussed design modifications and procedure enhancements that North Wind management is pursuing to ensure this ladder cannot accidentally become dislodged again. North Wind management is performing an extent of condition review to identify potential procedure improvements that will ensure similar events cannot occur in other areas of the facility.

Work Planning and Control (WP&C): This week, maintenance crafts personnel were removing a relief valve on a nitrogen line in Building 9225-3 when they observed a small amount of hazardous material. The hazard evaluation for this job did not anticipate the presence of this material's hazards; as such, the workers were not wearing the appropriate PPE. The workers paused work and notified the shift manager, who suspended the activity. During the fact-finding meeting on the event, maintenance, safety, and engineering personnel noted that they followed all required WP&C processes in preparation for the activity. However, they did not believe it was credible for this hazardous material to be present based on how the system's operating procedures required the system to be aligned. All maintenance work in the facility that does not require PPE to protect the worker from this material is paused until responsible managers determine what constitutes a valid basis for screening this material's hazards for a given work activity. The resident inspectors provided feedback to the responsible managers that they should consider whether other hazardous materials at Y-12 warrant a similar reevaluation.